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TASK 7. SERVICE AND SUPPORT

No work has been performed under Task 7 during this reporting period, pending the receipt of additional funding.

TASK 8. AS-6 DATA TELEMETERING SYSTEM

Field Unit: Work on the deliverable model of the field unit is well under way and is now rapidly approaching the final assembly and test stage. Accidental overheating of the power amplifier and exciter during environmental testing caused damage to these units and has delayed their final assembly by at least two weeks.

All ten r-f front end converter units were delivered by [redacted] 25X1 during the week of July 26 and have been tested. One converter was found to suffer from an intermittent connection, while another was found to have a broken wire which caused a loss of sensitivity. The entire receiver is now being assembled and will be ready for final testing concurrently with the exciter and power amplifier early in next reporting period. The i-f amplifier and output circuits have already been environmentally tested and found to perform satisfactorily.

Labeling of the main chassis and control circuits has been completed, as far as possible, without the final amplifier, exciter and receiver. The remaining wiring is expected to take approximately six hours.

A final assembly and test is scheduled to begin by August 6. A detailed schedule for the balance of the program was prepared during a recent visit by the cognizant Government engineer, and details relating to the subsequent Washington tests were settled.

The converter package, containing the three high voltage power supplies required by the Communication Package, is now being assembled. Delivery of this unit to the power source contractor has been scheduled for August 7.

The revised Field Unit antenna was measured at the operating frequencies at two locations to determine its characteristics. The average value obtained was used as design objective for the power amplifier output circuits.

Base Station: Modification of the AS-6 Transmit Terminal for remote control operation and the remote control unit were completed early in the month. The Terminal was re-aligned for the new operational frequencies required for use with the second model Field Unit, and then given a careful checkout just prior to shipping. 25X1

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The AS-6 Receiving Terminal was changed over to the new operational frequencies, which included re-alignment of six receivers, as well as the r-f simulator. During this reporting period, approximately two and one-half weeks of training were given to the Government representative, Mr. , Because of insufficient time, this training program did not include any of Transmit Terminal. It is the opinion of all engineers who were working with that he will require additional training, especially in the Transmit Terminal, before being capable of providing proper maintenance.

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A local storage company boxed and then transported the complete Base Station to the airport for shipment via American Airlines on August 29, 1959.

TASK 9. LINEAR EXCITER FOR THE AS-4A

This program has been delayed indefinitely, pending decisions on the future course of the AS-4B program. This action has been concurred in by the cognizant Government engineers.

TASK 10. FABRICATION OF RS-16B

To date, five Field Units have been delivered to the Government, two additional units now await final testing into the RD-59 Base Station, and the remaining three are being assembled. The chief difficulties are in quality control of commutator parts.

TASK 11. AS-16B BATTERY CHARGER

Assembly of all production models is now nearing completion. Final testing and delivery should take place during the next reporting period.

TASK 12. RS-16B ANTENNA TUNERS

The mechanical design layout of the Antenna Coupler, embodying all recent changes, as discussed with Government engineers during recent visits, is now approaching completion. Initial planning is for all components to be mounted on one plate. This assembly will then be installed in a drawn can, with a cover, to provide splash-proof protection.

TASK 13. CS-15 STUDY

This Task has been inactive for several months while decisions on its future direction are being made by the Government.

TASK 14. RS-24 STUDY

Extensive field testing in order to establish short-range detectability has been conducted and a typical test was demonstrated to the



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